

Speech rhythm in Friulian-Italian asymmetric early bilinguals

While there is a considerable amount of studies on the effects of language contact at the segmental level and a few about its consequences on intonation (e.g., Romera & Elordieta, 2013), less is known of its effects on rhythm. Nevertheless, recent studies (for a review, see Kireva & Gabriel, 2015) suggest that rhythmic transfer can take place in different language contact situations. While research about the acquisition of rhythm in bilingual children and about rhythm in adult learners of a foreign language is relatively abundant (for a review, see Matticchio, 2017), studies that deal with rhythm in early bilinguals are, to the best of our knowledge, less than ten (Schmid & Dellwo, 2012, 2013; Coetzee, Garcia-Amaya, Henriksen, & Wissing, 2015; Matticchio, 2017; Robles-Puente, 2019; Aldrich, 2020). This study aims at contributing to answer the question of whether there is some kind of rhythmic transfer/interference in adults who acquired two rhythmically different languages during the childhood. Specifically, it deals with the case of Friulian and the regional variety of Italian spoken in Friuli.

Both Italian and Friulian have been described as intermediate between the stress-timed and the syllable-timed poles of the rhythmic continuum. Nevertheless, Italian is much closer to the syllable-timed pole (see Mairano, 2011, for a review) and Friulian to the stress-timed one (Roseano, Elvira-García, & Rodríguez, 2020). Since the two languages are rhythmically different, the objective of this paper is to determine whether there is rhythmic transfer/interference in asymmetric early bilingual speakers of Friulian and Italian. To this aim, we recorded 12 subjects: all of them were born and lived in the Lower Valley of Gorto (Italy), have both parents from the same area, and are bilingual in Friulian and Italian. Six of them reported to be dominant in Friulian, which means that they declared that a) Friulian is the language they used with both parents in their childhood, b) Friulian is the language they use more frequently in their daily lives, c) they learned Italian during the second socialization (i.e. outside their family, basically at school and through the media, but during the childhood). The other six are dominant in Italian, which means that they declared that a) Italian is the language they used with both parents in their childhood, b) in their daily lives they speak almost exclusively Italian, c) they learned Friulian during the second socialization (i.e. outside their family, basically with their peers, but during the childhood).

Each speaker was asked to read aloud the text of *The North Wind and the Sun* in both languages. In addition, in order to control more effectively for the contribution of vocalic and consonants to the definition of rhythm (Arvaniti, 2012), each speaker recorded also a set of 14 sentences consisting of CV syllables only that contained the same vowels (but different consonants) in both languages. Vocalic and consonantal intervals were annotated in *Praat* textgrids, which were then processed by means of *Correlatore* (Mairano & Romano, 2010) in order to calculate and plot rhythm metrics (Ramus, Nespor, & Mehler, 1999; Grabe & Low, 2002).

While CV sentences do not provide a clear picture, the analysis of the recordings of *The North Wind and the Sun* (figures 1 and 2) show that there is a continuum between two poles. The stress-timed pole is occupied by the variety of Friulian spoken by dominants of Friulian (FRI-L1), while the syllable-timed pole is represented by the variety of Italian spoken by dominants of Italian (ITA-L1). The other two varieties

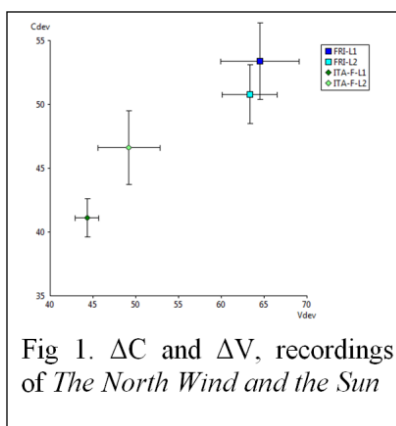


Fig 1. ΔC and ΔV , recordings of *The North Wind and the Sun*

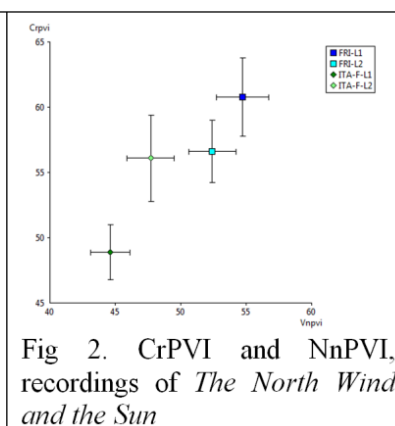


Fig 2. CrPVI and NnPVI, recordings of *The North Wind and the Sun*

lie in an intermediate position: Friulian spoken by dominants in Italian (FRI-L2) is close to the stress-timed pole, but slightly displaced towards Italian; Italian spoken by dominants in Friulian (ITA-L2) is closer to the stress-timed pole, but displaced towards Friulian. It seems, thus, that the variety spoken as an L2 is attracted rhythmically by the variety spoken as an L1 by the same speakers.

The first conclusion that can be drawn from this study is, thus, that in asymmetric early bilinguals there is a rhythmic transfer from the dominant to the non-dominant language, both in consonantal and in vocalic intervals. The second conclusion is that further studies are needed to determine exactly what is being transferred. In this sense, clarifications may come from the use of more controlled corpora, e.g. from scrutinizing a corpus of sentences that contain exactly the same vowels and consonants for both languages (as Vieru & Boula de Mareüil, 2005 did in their study of the rhythm of Spanish and Italian in contact).

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